WHAT IS CLAIMED IS:

1   1.   A system for managing data in multiple data processing devices using

2   common data paths, comprising:

3   a first data processing system comprising a memory, wherein said memory

4   comprises a cacheable coherent memory space; and

5   a second data processing system communicatively coupled to said first data

6   processing system, said second data processing system comprising at least one bridge,

7   wherein said bridge is operable to perform an uncacheable remote access to said

8   cacheable coherent memory space of said first data processing system.

1   2.   The system of claim 1, wherein the access performed by said bridge

2   comprises a data write to said memory of said first data processing system for

3   incorporation into said cacheable coherent memory space of said first data system.

1   3.   The system of claim 1, wherein the access performed by said bridge

2   comprises a data read from said cacheable coherent memory space of said first data

3   system.

1   4.   The system of claim 2, wherein the data written by said bridge during said

2   uncacheable remote access participates in a cacheable coherent memory protocol in said

3   cacheable memory space.

1   5.   The system of claim 4, wherein said converted data in said cacheable

2   coherent memory space is accessed by an agent subsequent to said conversion.

1   6.   The system of claim 5, wherein said remote access by said bridge and said

2   subsequent access by said agent conform to a producer-consumer protocol, wherein said

3   bridge corresponds to the producer and said agent corresponds to the consumer of said

4   producer-consumer protocol.

1   7.   The system of claim 6, wherein said data written by said bridge comprises

2   a payload memory and a flag memory, with said flag and said payload memory both

3   residing in a node defined by said first data system.

1   8.   The system of claim 7, wherein the remote access by said bridge to

2   perform said data write is performed in accordance with a set of predetermined ordering

3   rules.

1   9.   The system of claim 8, wherein said predetermined ordering rules for

2   performing said remote access data write comprise:

3   non-posted requests cannot bypass posted requests;

4   responses cannot bypass posted requests; and

5   posted requests cannot bypass posted requests.

1   10.   A method for managing data in multiple data processing devices using

2   common data paths, comprising:

3   establishing a coherent memory space in a first data processing system; and

4   accessing said coherent memory space with a second data processing system

5   communicatively coupled to said first data processing system, said second data

6   processing system comprising at least one bridge, wherein said bridge performs an

7   uncacheable remote access to said cacheable coherent memory space of said first data

8   processing system.

1   11.   The method of claim 10, wherein the access performed by said bridge

2   comprises a data write to said memory of said first data processing system for

3   incorporation into said cacheable coherent memory space of said first data system.

1   12.   The method of claim 10, wherein the access performed by said bridge

2   comprises a data read from said cacheable coherent memory space of said first data

3   system.

1   13.   The method of claim 11, wherein the data written by said bridge during

2 said uncacheable remote access participates in a cacheable coherent memory protocol in

3 said cacheable memory space.

1   14.   The method of claim 13, wherein said converted data in said cacheable

2 coherent memory space is accessed by an agent subsequent to said conversion.

1   15.   The method of claim 14, wherein said remote access by said bridge and

2 said subsequent access by said agent conform to a producer-consumer protocol, wherein

3 said bridge corresponds to the producer and said agent corresponds to the consumer of

4 said producer-consumer protocol.

1   16.   The method of claim 15, wherein said data written by said bridge

2 comprises a payload memory and a flag memory, with said flag and said payload

3 memory both residing in a node defined by said first data system.

1   17.   The method of claim 16, wherein the remote access by said bridge to

2 perform said data write is performed in accordance with a set of predetermined ordering

3 rules.

1   18.   The method of claim 17, wherein said predetermined ordering rules for
2 performing said remote access data write comprise:
3   non-posted requests cannot bypass posted requests;
4   responses cannot bypass posted requests; and
5   posted requests cannot bypass posted requests.